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|                    |  | Suggested                 | Phasing (coord             | dinate all shutdo                             | owns with CO                 | TR 21 days in                   | advance)                                      |
|--------------------|--|---------------------------|----------------------------|---|------------------------------|---------------------------------|---|
| Area               | Task   | Summer work<br>(5/1-9/30) | Winter work<br>(10/1-4/30) | Perform Prior<br>to Demolition<br>of Existing | 7 day<br>maximum<br>shutdown | 3 day period<br>over<br>weekend | During<br>Saturday tota<br>system<br>shutdown |
|                    | excavation between B1 and B15                              |                           | Х                          | Х   |                              |                                 |   |
| Fortanian Casas    | steam/cond. & domestic water piping between B1 & B15       |                           | Х                          | Х   |                              |                                 |   |
| Exterior Scope     | universal drip trap assemblies (existing B2&3 manholes)    | Х                         |                            |   |                              |                                 |   |
|                    | universal drip trap assemblies (existing B1 manholes)      | Х                         |                            |   |                              |                                 | Х   |
|                    | universal drip trap assemblies                             | Х                         |                            |   |                              |                                 | Х   |
|                    | F&T steam traps  | Х                         |                            |   |                              |                                 |   |
|                    | Baffle Type Moisture Separator (13-MS1)                    | Х                         |                            |   |                              |                                 | Х   |
|                    | safety relief valve (13-SRV1)                              | Х                         |                            |   |                              |                                 | Х   |
| Boiler Plant       | PRV single station (13-PRV1)                               | Х                         |                            |   |                              |                                 |   |
|                    | 2-way control valves                                       | Х                         |                            |   |                              |                                 |   |
|                    | flash tank (8-FT1)   |                           | Х                          |   |                              |                                 |   |
|                    | provide removable insulation jacketing                     |                           | Х                          |   |                              |                                 |   |
|                    | new piping and insulation                                  | Х                         |                            |   |                              |                                 |   |
|                    | Removals not associated with new work                      |                           | Х                          |   |                              |                                 |   |
| High Crawl Space   | LPS DDC control valves                                     | Х                         |                            |   |                              |                                 |   |
|                    | universal drip trap assemblies                             | X                         |                            |   |                              |                                 |   |
| /                  | install sparge pipe on drip                                | X                         |                            |   |                              |                                 | Х   |
|                    | Removals   | Х                         |                            |   |                              |                                 |   |
|                    | Plate and Frame converters (1-PFC1A & 1B)                  |                           | Х                          | Х   |                              |                                 |   |
|                    | relocate hydronic specialties                              | Х                         |                            |   |                              |                                 |   |
|                    | automatic pump traps on AHU-26 & 27 (1-APT2 & 3)           | Х                         |                            |   |                              |                                 |   |
|                    | inline heating hot water pumps (1-P1 & P2)                 |                           | Х                          | Х   |                              |                                 |   |
| C-Section          | 1-PRV1A & 1B serving AHU-26 &27                            | Х                         |                            |   | Χ*                           |                                 |   |
| Mechanical Room    | ILVA steam meter (1-SSM1 on Sheet 1-MB1)                   | X                         |                            |   | X*                           |                                 |   |
|                    | replace butterfly valve serving 4th flr ph                 | X                         |                            |   | Χ*                           |                                 |   |
| MB1)               | single station prv (1-PRV2) serving O.R.                   | Х                         |                            |   | Χ*                           |                                 |   |
| ,                  | 1-PRV10A & 10B serving P&F HXs, AHU-17, 28, 29             | Х                         |                            |   |                              |                                 |   |
|                    | universal drip trap assemblies                             | Х                         |                            |   |                              |                                 |   |
|                    | flash tank (1-FT2)   | Х                         |                            |   |                              |                                 |   |
|                    | new piping and insulation                                  | Х                         |                            |   |                              |                                 |   |
|                    | DDC controls   | Х                         |                            |   |                              |                                 |   |
|                    | Removals not associated with new work                      |                           | Х                          |   |                              |                                 |   |
|                    | universal drip trap assemblies                             | Х                         |                            |   |                              |                                 |   |
|                    | replace old steam piping                                   | Х                         |                            |   |                              |                                 |   |
| MS1)               | replace existing pipe insulation                           |                           | Х                          |   |                              |                                 |   |
| - ,                | new piping to kitchen                                      |                           | X                          |   |                              |                                 |   |
|                    | Removals not associated with new work                      |                           | Х                          |   |                              |                                 |   |
|                    | moisture separator (1-MS1)                                 | Х                         |                            |   |                              |                                 | Х   |
|                    | bypass globe valves  | X                         |                            |   |                              |                                 |   |
|                    | 1-PRV3 & 4 serving LPS zones                               | X                         |                            |   |                              |                                 |   |
|                    | 1-PRV5 serving future kitchen                              |                           | Х                          | х   |                              |                                 |   |
|                    | 1-PRV6 & associated piping serving future SPS              |                           | X                          |   |                              |                                 |   |
| ank Room (Sheets 1 | universal drip trap assemblies                             | Х                         |                            | 1   |                              |                                 |   |
| DS4 & 1-MS4)       | color coded PVC jacketing                                  | ^                         | Х                          |   |                              |                                 |   |
|                    | replace butterfly valves                                   | Х                         |                            |   |                              | <u> </u>                        | Х   |
|                    | P&F HX 1-PFC2B & assoc. controls for Imaging Addition      |                           | Х                          |   |                              |                                 |   |
|                    | DHW recirculating pump (1-DWRP1)                           |                           | X                          | х   |                              |                                 |   |
|                    | flash tank (1-FT1)   | Х                         | ,,                         |   |                              |                                 |   |
|                    | new piping to building 15                                  |                           | Х                          | Х   |                              |                                 |   |
|                    | new piping to building 15 new piping for kitchen equipment |                           | X                          | X   |                              |                                 |   |
|                    | Removals not associated with new work                      |                           | X                          |   |                              |                                 |   |
| Crawl Space - Area | universal drip trap assemblies                             | Х                         | ^                          | <del> </del>                                  |                              |                                 |   |
|                    | replace old steam piping                                   | X                         |                            |   |                              |                                 |   |
| -                  | replace existing pipe insulation                           | ^                         | .,                         | <b>+</b>                                      |                              | <del> </del>                    |   |
| MS21               |  |                           | X                          |   |                              |                                 |   |

|                                |  | Suggested  | d Phasing (coord           | dinate all shutdo                                | wns with CO                  | TR 21 days in                                    | advance)                                      |
|--------------------------------|--|--|----------------------------|--|------------------------------|--|---|
| Area                           | Task   | Summer work<br>(5/1-9/30)                        | Winter work<br>(10/1-4/30) | Perform Prior<br>to Demolition<br>of Existing    | 7 day<br>maximum<br>shutdown | 3 day period<br>over<br>weekend                  | During<br>Saturday tota<br>system<br>shutdown |
|                                | Removals   | Х  |                            |  | Χ*                           |  |   |
|                                | 1-PRV7A & 7B   | X  |                            |  | Χ*                           |  |   |
| 4th Floor Penthouse            | new piping and insulation                                  | Х  |                            |  | Х*                           |  |   |
|                                | 2-way control valves                                       | Х  |                            |  |                              |  |   |
|                                | replace butterfly valves                                   | Х  |                            |  | Х*                           |  |   |
|                                | DDC controls   | Х  |                            |  |                              |  |   |
|                                | universal drip trap assemblies                             | Х  |                            |  | Х*                           |  |   |
|                                | Removals not associated with new work                      |  | Х                          |  |                              |  |   |
|                                | Propeller steam unit heaters                               | Х  |                            |  |                              |  |   |
|                                | DDC controls   | Х  |                            |  |                              |  |   |
|                                | new piping and insulation                                  | X  |                            |  |                              |  |   |
| 5th Floor Penthouse            | Direct injection humidifiers                               | X  |                            |  |                              |  |   |
|                                | repipe zone reheat coils                                   | X  | 1                          | 1  |                              |  |   |
| (011000 2 111202)              | 1-PRV8   | X  |                            |  |                              |  |   |
|                                | F&T traps  | X  |                            |  |                              |  |   |
|                                | inverted bucket traps                                      | X  |                            |  |                              |  |   |
|                                | universal drip trap assemblies                             | X  |                            |  |                              |  |   |
|                                | Removals   | X  |                            |  |                              |  |   |
| Oth Floor Ponthouse            | new piping and insulation                                  | X  |                            |  |                              |  |   |
|                                |  | X  |                            |  |                              |  |   |
| (Sileet 1-MD92)                | universal drip trap assemblies                             |  |                            |  |                              | -  |   |
|                                | 1-PRV9A & 9B   | X  |                            |  |                              |  |   |
|                                | Removals   | X  |                            |  |                              |  |   |
|                                | ILVA meter (1-SSM2)  | X  |                            |  |                              |  |   |
| 10th Floor                     | shell & tube converter (1-STC1)                            | X  |                            |  |                              |  |   |
| Penthouse (Sheet 1-            | inline heating hot water pumps (1-P3, P4, P5)              | X  |                            |  |                              |  |   |
| MD101)                         | new piping and insulation                                  | X  |                            |  |                              |  |   |
|                                | DDC controls   | Х  |                            |  |                              |  |   |
|                                | universal drip trap assemblies                             | Х  |                            |  |                              |  |   |
|                                | F&T steam traps  | Х  |                            |  |                              |  |   |
|                                | Removals   | X**  |                            |  |                              |  |   |
|                                | P&F skid packages (15-PFC 1A & 1B)                         | X**  |                            |  |                              |  |   |
|                                | inline heating hot water pump (15-P1 & P2)                 | X**  |                            |  |                              |  |   |
|                                | new piping and insulation                                  | X**  |                            | Х  |                              | Х  |   |
| 15-DB1 & 15-MB1)               | DDC controls   | X**  |                            |  |                              |  |   |
|                                | universal drip trap assemblies                             | X**  |                            |  |                              |  |   |
|                                | 15-PRV1A & 1B serving sterilizer, bottle washer, autoclave | X**  |                            | Х  |                              |  |   |
|                                | 15-PRV 2A & 2B serving P&F HXs, AHU-30,31                  | X**  |                            |  |                              |  |   |
|                                | Removals   | Х  |                            |  |                              |  |   |
| Generator Room                 | 2-position DDC control valves                              | X  |                            |  |                              |  |   |
| (Sheets 1-DB1 & 1-             | universal drip trap assemblies                             | Х  |                            |  |                              |  |   |
| MB1)                           | F&T steam traps  | Х  |                            |  |                              |  |   |
|                                | new piping and insulation                                  | Х  |                            |  |                              |  |   |
| AHU-17 Mech.<br>Room (Sheet 1- | Removals   | Х  |                            |  |                              |  |   |
|                                | automatic pump trap (1-APT1)                               | Х  |                            |  |                              |  |   |
| MDB2)                          | new piping and insulation                                  | Х  |                            |  |                              |  |   |
| 4th Floor (Sheet 1-            | re-pipe autoclave  |  | Х                          | Х  |                              |  |   |
| MD42)                          | removals of abandoned piping above ceiling                 |  | Х                          |  |                              |  |   |
| N A/C Shaft (Sheet 1-<br>MDR2) | Replace hot water piping                                   | х  |                            |  |                              |  |   |
|                                | Replace hot water piping                                   | Х  | 1                          | 1  |                              |  |   |
| MDR1)                          | Replace steam & condensate risers                          | X  |                            |  |                              |  |   |
|                                | Remove abandonded piping                                   |  | Х                          |  |                              |  |   |
| MDB3)                          | Misc. universal thermodynamic traps                        | Х  | <u> </u>                   |  |                              |  |   |
| MISC. (Sheets 1-               |  | <del>-                                    </del> | t                          | <del>                                     </del> |                              | <del>                                     </del> |   |

Χ

MISC. (Sheets 1-

MDV1 & 1-MDV2)

Replace 2-way control valves with 3-way

<sup>\*</sup> Note: One common 7-day shutdown

 $<sup>\</sup>ensuremath{^{**}}$  Note: All work in Building 15 to be done during the month of May